# Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

# Sacramento River Basin

NA0012	Overall LMA Rating	Total LMA Miles						
Solano County Public Works Mellin Levee	U	0.59						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design & System Obsolescence	
Rateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Trim / Thin Trees		0.01	0.04	6.75%				
Encroachments					0.69			
Crown Surface / Depressions / Rutting	0.44		0.44	74.21%				
LMA Totals:	0.44	0.01	0.48	80.96%	0.69	0.00	0.00	0.00
Unit No. 01 Mellin Levee RB	Overall Unit Rating	Total Unit Miles						
NA0012	U	0.59						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design 8 Obsole	
Rateu item				T	NA NATION	I I Milaa	M Miles	I I BATT
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	IVI IVIIICS	U Miles
Earthen Levee	M Miles	U Miles	M + 4U Miles	Threshold %	IVI IVIIIes	U Miles	IVI IVIIIES	U Miles
Earthen Levee Trim / Thin Trees	M Miles	0.01	0.04	6.75%	IVI Miles	U Miles	IVI IVIIIES	U Miles
	M Miles				0.69	U Miles	W Wiles	U Miles
Trim / Thin Trees	M Miles					O Miles	Wilvines	U Miles

Winter \*\*

# Flood Control Project Maintenance Levee Inspections

# **LMA District Cover Sheet**

# Fall 2016 Levee Inspection Results

# **Solano County Public Works Mellin Levee**

Summer \*\*

Spring

	(March - May)	(Julie - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)			U	
	** Non-receipt of Summ Reports may effect or			
FALL INSPECTIONS: The overall maintena	d using the same criterance rating shown abo	ria in the spring and in ve is based on operati	the fall.	ficiencies identified
Comments				

# **Unit Cover Sheet**

# Fall 2016 Levee Inspection Results

# **Solano County Public Works Mellin Levee**

Waterway	Bank	Unit Miles
Unit No. 01 Mellin Levee	Right	0.59

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/24/2016 - 3/24/2016		11/3/2016 - 11/3/2016	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By	Thomas Pate Solano County Water Agency		Thomas Pate Solano County Water Agency	

## Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

## http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2016

# **Solano County Public Works Mellin Levee**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Mellin Levee	Right	0.59	11/03/2016 11/03/2016	Richard Willoughby

0.00	Rating **	Α	Issue No.		6	_	
		Ma	Location *				
	· · · · · · · · · · · · · · · · · · ·		GPS La	atituc			
			Start		End		
	s & Maintena	nce		0		0	
Manuals					0		
DWR ID DWR_NA0012_01_s _ 2013_6							
	Comn	nent Cod	de				
	1	0	1				
	Inspecto	or Comm	nent				
LMA has a copy of the O & M Manuals on file at the office.							
	Operation Manuals DWR_NA0	0.00 Issue Type + Earthen Levee Operations & Maintenal Manuals DWR_NA0012_01_s _ 201 Comn	0.00 Issue Type + Ma Earthen Levee Operations & Maintenance Manuals DWR_NA0012_01_s _ 2013_6 Comment Coo	0.00 Issue Type + Ma Location *  Earthen Levee GPS La Start  Operations & Maintenance Manuals  DWR_NA0012_01_s _ 2013_6  Comment Code  Inspector Comment	0.00 Issue Type + Ma Location *  Earthen Levee GPS Latitud Start  Operations & Maintenance Manuals   DWR_NA0012_01_s _ 2013_6 Comment Code  Inspector Comment	0.00         Issue Type +         Ma         Location *         N/A           Earthen Levee         GPS Latitude/Longitude           Start         End           Operations & Maintenance Manuals         °           DWR_NA0012_01_s _ 2013_6         °           Comment Code   Inspector Comment	

No Photos

LM Start	0.00	Rating **	Α	Issue No.		7	
LM End	0.00	Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		y Supplies &			0		0
item	Equipmer	it			٥		0
DWR ID	DWR_NA0	012_01_s _ 201	3_7				
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
LMA has a	ın adequat	e supply of flo	od fight	supplies or	n har	nd.	

No Photos

LM Start	0.00	Rating **	Α	Issue No.		9		
LM End	0.00	Issue Type +	Ма	Location *		N/A		
Category	Earthen L	evee		GPS La	atituc	le/Longitude		
Category				Start		End		
Item	Flood Pre	paredness &	Training		0		0	
пеш					0		0	
DWR ID	DWR_NA0	012_01_s _ 201	3_9					
		Comn	nent Cod	le				
		Inspecto	or Comm	ent				
Latest train	Latest training Oct. 2014							

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# **Levee Inspection Report By Mile - Fall 2016**

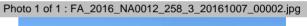
# **Solano County Public Works Mellin Levee**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Mellin Levee	Right	0.59	11/03/2016 11/03/2016	Richard Willoughby

LM Start	0.00	Rating **	A/W	Issue No.		1		
LM End	0.00	Issue Type +	Ма	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.1740	51 °	38.174051 °		
пеш				-121.6742	20°	-121.674221 °		
DWR ID	DWR_NA0	012_01_s _ 201	2_1					
		Comn	nent Cod	de				
V2 : Remo slopes.	V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment								
Control Ar	Control Arundo on waterside slope at the entrance to the levee.							

No Photos

LM Start	0.01	Rating **	М	Issue No.		3
LM End	0.49	Issue Type +	En	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		38.1741	67°	38.178960°
пеш				-121.6743	12°	-121.680600°
DWR ID	DWR_NA0	012_01_s _ 201	2_3			·
		Comn	nent Cod	de		
FE : Fence	9					
			_			
		Inspecto	or Comm	nent		





Looking west at fence on waterside shoulder.

Photo 1 of 1: FA\_2016\_NA0012\_258\_4\_20161007\_00003.jpg

LM Start	0.10	Rating **	М	Issue No.		4	
LM End	0.28	Issue Type +	En	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments			38.175115°		38.176805°	
item						-121.677893 °	
DWR ID	DWR_NA0	2_4					
Comment Code							
FE : Fence							

Inspector Comment



Looking southeast at fence on landward slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Solano County Public Works Mellin Levee**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Mellin Levee	Right	0.59	11/03/2016 11/03/2016	Richard Willoughby

LM Start	0.15	Rating **	М	Issue No.		10		
LM End	0.59	Ма	Location *		CR			
Category	Earthen Levee				atitud	e/Longitude		
Calegory				Start		End		
Item		Crown Surface / Depressions /			27°	38.180044°		
item	Rutting			-121.676185 °		-121.681978°		
DWR ID DWR_NA0012_01_s _ 2015_10								
Comment Code								
C2 : Repai	C2 : Repair depressions or ruts in the crown or slope.							
		Inspecto	or Comm	ent				
Repair ruts and add appropriate gravel or road base.								

LM Start	0.15	Rating **	М	Issue No.	10 (cont)
LMEnd	0.50	Iceua Typa +	Ma	Location *	CP

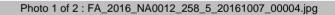
# Photo 1 of 2 : FA\_2016\_NA0012\_258\_10\_20161107\_00011.jpg

Looking west at ruts on levee crown.

Photo 2 of 2: FA\_2016\_NA0012\_258\_10\_20161107\_00012.jpg



LM Start	0.57	Rating **	М	Issue No.		5		
LM End	0.59	Issue Type +	En	Location *		WS		
Category	Catagori Earthen Levee				atitud	e/Longitude		
Calegory				Start		End		
Item	Encroachi	ments		38.1797	83°	38.180027°		
пеш				-121.681648°		-121.681978°		
DWR ID DWR_NA0012_01_s _ 2012_5								
	Comment Code							
FE : Fence	FE : Fence							
	Inspector Comment							
Animal corral.								





Looking east at animal corral on waterside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Solano County Public Works Mellin Levee**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Mellin Levee	Right	0.59	11/03/2016 11/03/2016	Richard Willoughby

11100	0.57	Rating **	М	Issue No.		E (cont)	
LM Start	0.57	Rating	IVI	issue ivo.		5 (cont)	
LM End	0.59	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	Encroachments			83°	38.180027°	
пеш					48 °	-121.681978°	
DWR ID DWR_NA0012_01_s _ 2012_5							
	Comment Code						
FE : Fence	Э						
Inspector Comment							
Animal corral.							

# Photo 2 of 2 : FA\_2016\_NA0012\_258\_5\_20161007\_00005.jpg



Looking west at animal corral on waterside toe.

LM Start	0.58	Rating **	М	Issue No.		2		
LM End	0.58	Issue Type +	En	Location *		WS		
Category	evee	GPS Latitude/Longitude						
Calegory	Category					End		
Item	Encroachments			38.1799	51 °	38.179951 °		
item			-121.6818	54°	-121.681854°			
DWR ID	R ID DWR_NA0012_01_f _ 2015_2							
	Comment Code							

# TA : Tank

## Inspector Comment

Water tank and fencing on waterward shoulder and slope.

# Photo 1 of 1 : FA\_2016\_NA0012\_258\_2\_20161007\_00001.jpg



Looking north at water tank stored at waterward toe.

LM Start	0.59	Rating **	U	Issue No.	12			
LM End	0.59	Issue Type +	Ma	Location *	LS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thin Trees			38.1800	62°	38.180062°		
item				-121.6819	93°	-121.681993°		
DWR ID	DWR_NA0	012_01_s _ 201	5_12					
	Comment Code							
T1 : Trim trees to at least five feet above ground level.								
	Inspector Comment							

## Inspector Comment

Untrimmed tree on landward shoulder and slope.



Looking southwest at untrimmed tree on landward slope. (Fall 2016)

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Solano County Public Works Mellin Levee**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Mellin Levee	Right	0.59	11/03/2016 11/03/2016	Richard Willoughby

LM Start	0.59	Rating **	U	Issue No.	12 (cont)			
LM End	0.59	Issue Type +	Ma	Location *	LS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Trim / Thin Trees		38.180062°		38.180062°				
пеш				-121.681993 °		-121.681993°		
DWR ID DWR_NA0012_01_s _ 2015_12								
Comment Code								
T1 : Trim trees to at least five feet above ground level.								
Inspector Comment								
Untrimmed tree on landward shoulder and slope.								

Photo 2 of 2 : FA\_2016\_NA0012\_258\_12\_20161007\_00009.jpg



Looking at untrimmed tree on landward slope fall 2015.